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EXAMINER	
PHILLIPS, HASSAN A	
ART UNIT	PAPER NUMBER
2151	

DATE MAILED: 11/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/843,249	ALBANESE ET AL.	
	Examiner	Art Unit	
	Hassan Phillips	2151	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *19 September 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-60* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-60* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. This action is in response to communications filed on September 19, 2005.

Continued Examination Under 37 CFR 1.114

2. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on September 19, 2005 has been entered.

Specification

3. Examiner acknowledges Applicant's amendments made to the specification. The amendments will not be entered because they introduce new matter that was not disclosed in the original specification.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. Claims 1, 33, 34, 52-55, and 57-59, are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s)

contain subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. As mentioned in previous actions, Applicant has failed to disclose a network-distributed application routing controller implemented in at least one user node or server in the original specification. Instead, Applicant discloses a routing controller (150, 305) , that is separate from both user nodes and servers. Throughout the specification Applicant describes the routing controller as being **coupled** to the network to **receive data from system nodes,** (page 6, lines 12-14, page 10, line 15 through page 11, line 16). Applicant's drawings further show the routing controller (150, 305) as a stand-alone component, separate from all user nodes and servers, (Fig.'s 2 and 3).

6. Claims 1, 33 34, 52-55, and 57-59, are further rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for a stand alone routing controller (150) coupled to a network (page 6, lines 12-14, page 10, line 15 through page 11, line 16, Fig.'s 2 and 3), does not reasonably provide enablement for a routing controller implemented within a user node or server. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to use the invention commensurate in scope with these claims. From the original specification, one of ordinary skill in the art would not be enabled to use a routing controller implemented within a user node or server since the specification only discloses using the routing controller as a separate component coupled to a network.

With regards to claims 55, and 58, Applicant has further failed to disclose how one of ordinary skill in the art would use the directing routing of the requested data not including routing data from a network server to a user node.

7. Accordingly, Examiner has interpreted the amended claims with little weight given to limitations disclosing the routing controller implemented in user nodes or servers. Furthermore, Examiner has interpreted the amended claims as best understood.

Response to Arguments

8. Applicant's arguments have been considered but are moot in view of the new ground(s) of rejection and reasons previously indicated.

Claim Rejections - 35 USC § 102

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

10. Claims 1-14, 20-30, 32-39, 43-45, 48-60, are rejected under 35 U.S.C. 102(e) as being anticipated by Yates et al. (hereinafter Yates), U.S. Patent 6,167,438.

11. In considering claims 1, 33, 34, and 60, Yates discloses a system and method for directing data between user nodes on an Internet protocol (IP) network having a plurality of communication links, the system and method comprising: an origin node (20) coupled to the network (10) and adapted to supply data to the network, (col. 6, lines 3-17); a plurality of user nodes (12, 16), each user node including a computer device coupled to the IP network and configured and arranged to store data supplied by the origin node and to adaptably deliver at least at least a portion of the data supplied by the origin node to a computer device at another one of the plurality of user nodes, (col. 6, lines 3-17, col. 7, lines 9-45); a plurality of servers adapted to route data between at least one of the user nodes and the network, (col. 6, lines 31-38); and a network-distributed application routing controller implemented in a personal computer device in at least one of the plurality of user nodes and in at least one of the plurality of servers, adapted to respond to a data request from one of the plurality of user nodes by identifying a personal computer device at a user node bearing the requested data and by directing routing of the requested data from the identified personal computer device to a computer device at a user node to which the data has been requested to be delivered, (col. 6, lines 31-38, col. 7, lines 9-45).

12. In considering claim 2, Yates teaches at least one of the pluralities of user nodes being further adapted to provide data location information to the network, the data location information including the type of data stored at the user node, (col. 1, lines 23-36).

13. In considering claim 3, Yates teaches the application routing controller being adapted to receive the data location information form the user node and direct the routing in response to the received data location information, (col. 6, lines 31-38).

14. In considering claim 4, Yates teaches one of the servers and at least two of the user nodes making up a local network, wherein the routing controller effects data routing between two user nodes coupled to the server via the local network, (col. 5, line 59-col. 6, line 2, Fig. 1).

15. In considering claim 5, Yates teaches the server for the local network including an edge server, (col. 19, lines 11-19).

16. In considering claim 6, Yates teaches the server for the local network includes a replication device adapted to replicate data and wherein the server is adapted to send the replicated data to one of the user nodes, (col. 14, lines 27-44).

17. In considering claim 7, it is inherent in the teachings of Yates that server for the local network replicates data in response to a command from the controller, (col. 14, lines 27-44).

18. In considering claim 8, Yates teaches a replication device adapted to replicate data and send the replicated data to a user node via the network, (col. 14, lines 27-44).

19. In considering claim 9, Yates teaches a network data traffic monitor adapted to detect a characteristic of one or more of the communication links for use in routing the data, (col. 8, lines 20-28).

20. In considering claim 10, Yates teaches the application routing controller including the traffic monitor, (col. 8, lines 20-28).

21. In considering claim 11, it is inherent in the teachings of Yates that the traffic monitor is adapted to detect a characteristic that includes the rate at which a particular communications link can transfer data, (col. 8, lines 20-28).

22. In considering claim 12, it is inherent in the teachings of Yates that the traffic monitor is adapted to detect a characteristic representing the capacity of a communication link to transfer additional data, (col. 8, lines 20-28).

23. In considering claim 13, Yates teaches the application routing controller being adapted to use the characteristic detected by the traffic monitor to direct data routing via a communication link identified as having sufficient availability to transfer the data, (col. 8, lines 20-28).

24. In considering claim 14, Yates teaches the application routing controller delaying a data transfer in response to the communication link being unable to handle additional data transfer, (col. 8, lines 20-28).

25. In considering claim 20, Yates teaches one of the user nodes being adapted to simultaneously transfer data from a data set while the data set is being received, in response to a command from the application routing controller, (col. 6, lines 9-30, col. 12, lines 12-33).

26. In considering claim 21, it is inherent in the teachings of Yates that one of the user nodes is adapted to delay subsequent transfer of received data until a selected amount of data has been received, (col. 6, lines 9-30, col. 8, lines 20-28, col. 12, lines 12-33).

27. In considering claim 22, it is inherent in the teachings of Yates that one of the user nodes is adapted to effect the delay in response to rates at which it is receiving and sending the data, wherein the delay is sufficient to reduce the possibility of running

out of data for a subsequent transfer due to the rate at which the data is being received, (col. 6, lines 9-30, col. 8, lines 20-28, col. 12, lines 12-33).

28. In considering claims 23, 49, it is inherent in the teachings of Yates a subscription content manager programmed to manage system subscriptions to a provider's content, the subscription management including providing authorization for a particular user to receive selected content data, (col. 1, lines 6-22, col. 4, line 60-col. 5, line11).

29. In considering claim 24, Yates teaches the application routing controller is adapted to direct routing in response to the provided authorization, (col. 1, lines 6-22, col. 4, line 60-col. 5, line 11).

30. In considering claim 25, Yates teaches the routing controller programmed to track and report data transfer information, (col. 12, lines 12-33).

31. In considering claim 26, Yates teaches the user nodes programmed to track and report data transfer, (col. 12, lines 12-33).

32. In considering claim 27, Yates teaches the application router controller being adapted to direct data transfer of streaming media content for immediate use at one of the user nodes, (col. 1, line 66-col. 2, line 16, col. 6, lines 9-17).

33. In considering claim 28, Yates teaches at least one of the user nodes making the received data available for use in response to a transmission report being sent from the at least one of the user nodes to the application routing controller, (col. 7, lines 9-45).

34. In considering claim 29, Yates teaches the application routing controller being adapted to send a security code to the at least one of the user nodes in response to the transmission report being received, wherein the at least one of the user nodes is adapted to use the security code to make the received data useable at the at least one of the user nodes, (col. 4, line 60-col. 5, line 11).

35. In considering claim 30, Yates teaches the at least one of the user nodes being adapted to decrypt the received data to make it available for use, (col. 18, lines 21-36).

36. In considering claim 32, Yates teaches the application routing controller sharing data transfer information with other application routing controllers, and using the data location information ascertained by other application routing controllers, (col. 16, lines 45-59).

37. In considering claim 35, Yates teaches identifying a personal computer device at a user node bearing the requested data including ascertaining information from the plurality of user nodes that describes data stored at the user node, (col. 7, lines 9-45).

38. In considering claim 36, Yates teaches programming the user nodes to provide the data location information that is used in directing the routing, (col. 7, lines 9-45).

39. In considering claim 37, Yates teaches sending a request to each user node, wherein each user node responds to the request by sending data location information that is used in directing the routing, (col. 1, lines 23-49, col. 2, lines 44-57).

40. In considering claim 38, Yates inherently teaches routing a live event using streaming data, (col. 1, line 66-col. 2, line 16, col. 6, lines 9-15).

41. In considering claim 39, Yates inherently teaches selecting a pay-per-view media event via the network, wherein routing the data includes routing the media event, (col. 1, line 66-col. 2, line 16, col. 6, lines 9-15).

42. In considering claim 43, Yates teaches detecting the amount of data traffic on the network, wherein directing routing includes using the detected amount of data traffic

to select a communication link over which to send the data, (col. 8, lines 20-28, col. 14, lines 27-44).

43. In considering claim 44, Yates teaches directing routing of data from more than one node, (col. 6, lines 30-45).

44. In considering claim 45, Yates teaches identifying a personal computer device at a user node bearing the requested data includes identifying another personal computer device at a user node bearing the requested data while the data is being routed, and wherein directing routing of the requested data includes directing the routing from the other identified personal computer device, (col. 2, lines 44-57).

45. In considering claim 48, Yates teaches the data request including a routing priority, wherein directing routing includes routing the data according to the priority, (col. 16, lines 35-40).

46. In considering claim 50, Yates teaches directing the origin node to deliver a data file to the network, (col. 6, lines 31-38).

47. In considering claim 51, Yates teaches the network-distributed application routing controller being configured and arranged to direct routing of the supplied data from a node on the network to the user node to which the data has been requested to

be delivered via one of the plurality of communication links and using at least one of the servers, the routing being directed in response to the identified personal computer device and the location of the user node to which the data has been requested to be delivered, (col. 7, lines 9-45).

48. In considering claims 52 and 57, Yates teaches the network-distributed application routing controller is implemented in the identified personal computer device at a user node bearing the requested data and is adapted to route the requested data from the identified personal computer device to the computer device at a user node to which the data has been requested to be delivered, (col. 7, lines 9-45).

49. In considering claim 53, Yates teaches a portion of the network-distributed application routing controller is implemented in the identified personal computer device routes the requested data to the computer device at a user node to which the data has been requested to be delivered without routing the data via any of the plurality of servers, (col. 6, lines 45-49, col. 7, lines 9-45).

50. In considering claim 54, Yates inherently teaches the network-distributed application routing controller is implemented in the identified personal computer device at a user node bearing the requested data and is adapted to route the requested data from the identified personal computer device to the computer device in a telephone to

which the data has been requested to be delivered, (col. 5, line 59-col. 6, line 17, col. 7, lines 9-45).

51. In considering claims 55 and 58, Yates teaches the network-distributed application routing controller does not route any data from a network server to a user node, (col. 8, line 50-col. 9, line 7).

52. In considering claim 56, Yates teaches the network-distributed application routing controller includes a network routing arrangement coupled to the IP network and software implemented at the identified personal computer device, the network routing arrangement communicating with the personal computer device and implementing the software at the personal computer device to route the requested data, (col. 7, lines 9-45).

53. In considering claim 59, Yates teaches directing routing of the requested data includes communicating routing commands from a portion of the network-distributed application routing controller in the server to a portion of the network-distributed application routing controller at the identified personal computer device, and implementing the routing commands at the identified personal computer device to route the requested data from the identified personal computer device to the computer device at the user node to which the data has been requested to be delivered, (col. 7, lines 9-45).

Claim Rejections - 35 USC § 103

54. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

55. Claims 15, 16, 40-42, are rejected under 35 U.S.C. 103(a) as being unpatentable over Yates in view of Miller et al. (hereinafter Miller), U.S. patent 5,920,701.

56. In considering claim 15, although the disclosed system of Yates shows substantial features of the claimed invention, it fails to expressly disclose: predicting the amount of data that will be transferred during a particular time.

Nevertheless, in a similar field of endeavor, Miller teaches a method for scheduling data transmission comprising: a routing controller (10), for detecting a characteristic to predict the amount of data that will be transferred over a communication link during a particular time period, (col. 8, lines 34-49).

Thus, given the teachings of Miller, it would have been obvious to a person of ordinary skill in the art at the time of the present invention to modify the teachings of Yates to show the routing controller detecting a characteristic to predict the amount of data that will be transferred over a communication link during a particular time period.

This would have facilitated delivery of data to requesting nodes in an optimized and efficient manner, (Miller col. 1, lines 51-56).

57. In considering claims 16 and 40, Miller teaches the routing controller directing the data transfer during a time period that is predicted to have a lower amount of data being transferred in relation to another time period, (col. 10, lines 1-19). One of ordinary skill in the art would modify the teachings of Yates with Miller for the same reasons indicated in consideration of claim 15.

58. In considering claim 41, Miller teaches scheduling the routing to occur when the detected amount of data traffic reaches a target traffic level, (col. 10, lines 1-19). One of ordinary skill in the art would modify the teachings of Yates with Miller for the same reasons indicated in consideration of claim 40.

59. In considering claim 42, although the disclosed system of Yates shows substantial features of the claimed invention, it fails to expressly disclose: re-evaluating a routing schedule before a scheduled routing time.

Nevertheless, in a similar field of endeavor, Miller teaches a method for scheduling data transmission comprising: re-evaluating a routing schedule before a scheduled routing time, (col. 12, lines 21-41).

Thus, given the teachings of Miller, it would have been obvious to a person of ordinary skill in the art at the time of the present invention to modify the teachings of

Yates to show re-evaluating a routing schedule before a scheduled routing time. This would have facilitated delivery of data to requesting nodes in an optimized and efficient manner, (Miller col. 1, lines 51-56).

60. Claims 17, 46, 47, are rejected under 35 U.S.C. 103(a) as being unpatentable over Yates in view of Wolpert, U.S. patent 6,577,601.

61. In considering claims 17 and 46, although the disclosed system of Yates shows substantial features of the claimed invention, it fails to expressly disclose: routing data using a least-cost route.

Nevertheless, routing data using a least-cost route was well known in the art at the time of the present invention. In a similar field of endeavor Wolpert teaches this where he discusses the prior art. More specifically, Wolpert discloses: routing data over a particular communication link using a least cost route, (col. 2, lines 24-31).

Thus, it would have been obvious to a person of ordinary skill in the art at the time of the present invention to modify the teachings of Yates to show the routing controller detecting a characteristic that includes the cost of routing data over a particular communication link and to direct the data using the least-cost route. Doing so would have minimized resource utilization while implementing a cost-efficient, user-friendly means for transparently routing data from one point to another.

62. In considering claim 47, it is implicit in the teachings of Wolpert that a cost is associated with at least one of: the distance that data must travel over a selected data routing path, the cost of sending data over a selected data routing path, and the cost of sending the data at a selected time of day, (col. 2, lines 24-57). One of ordinary skill in the art would modify the teachings of Yates with Wolpert for the same reasons indicated in consideration of claim 46.

63. Claims 18, 19, are rejected under 35 U.S.C. 103(a) as being unpatentable over Yates in view of Wolpert, and further in view of Miller.

64. In considering claim 18, although the disclosed system of Yates in view of Wolpert shows substantial features of the claimed invention, it fails to expressly disclose: detecting a delivery related characteristic.

Nevertheless, the method of Miller teaches: a routing controller (10), for detecting a delivery related characteristic, (col. 6, lines 35-51).

Thus, given the teachings of Miller, it would have been obvious to a person of ordinary skill in the art at the time of the present invention to modify the teachings of Yates to show the routing controller detecting a characteristic that includes a delivery-related characteristic of routed data over a particular communications link, and to direct the data using a least cost route meeting a selected delivery-related characteristic criteria. This would have facilitated delivery of data to requesting system nodes in an optimized and efficient manner, (Miller col. 1, lines 51-56).

65. In considering claim 19, Miller teaches the delivery-related characteristic including at least one of: data transmission accuracy; data transmission speed; data transmission security and data transmission time, (col. 6, lines 35-51). One of ordinary skill in the art would combine the teachings of Yates with Miller for the reasons indicated in consideration of claim 18.

66. Claim 31 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yates in view of Reed et al. (hereinafter Reed), U.S. patent 5,862,325.

67. In considering claim 31, although the disclosed system of Yates shows substantial features of the claimed invention, it fails to expressly disclose: Using Object Oriented Programming (OOP).

Nevertheless, OOP was well known in the art at the time of the present invention. This is exemplified in the method taught by Reed where the method teaches: communicating over a network using OOP, (col. 8, lines 51-63).

Thus, given the teachings of Reed, it would have been obvious to a person of ordinary skill in the art at the time of the present invention to modify the teachings of Yates to show the application routing controller communicating over the network using OOP communication. This would have simplified transfer, storage and processing of the communication data, (Reed, col. 8, lines 51-63).

Conclusion

68. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hassan Phillips whose telephone number is (571) 272-3940. The examiner can normally be reached on M-F 8:00am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Zarni Maung can be reached on (571) 272-3939. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

HP/
11/21/05

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SUPERVISORY PATENT EXAMINER